

What is claimed is:

1. (Currently Amended) A Process for producing a metal-ceramic substrate comprising a ceramic layer and a structured metal layer with conductive tracks and contact surfaces on at least one surface side of the ceramic layer and a brazing resist applied to the structured copper layer, the process comprising the following steps:

a) applying at least one metal foil to at least one surface side of the ceramic layer by high temperature bonding at a bonding process temperature higher than 650°C for forming at least one metal layer on the ceramic layer,

b) structuring the metal layer on at least one surface side of the ceramic layer for forming the structured metal layer with conductive tracks and contact surfaces,

c) applying the at least one coating of a brazing resist to the structured metal layer after the structuring, and

d) after applying the brazing resist to the structured copper layer, removing some metal from the structured metal layer in an amount of 0.1-20 microns at least in surface areas bordering the brazing resist coating.

2. (Cancelled)

3. (Previously Presented) A process as claimed in claim 1, wherein high temperature bonding is a direct bonding process.

4. (Previously Presented) A process as claimed in claim 1, wherein high temperature bonding is an active brazing process.

5. (Previously Presented) A process as claimed in claim 1, wherein at least one coating of brazing resist is applied before structuring.

6. (Previously Presented) A process as claimed in claim 1, wherein at least one coating of brazing resist is applied after structuring.

7. (Previously Presented) A process as claimed in claim 1, wherein the metal foils are copper foils and they are provided on the ceramic substrate by means of the DCB process or the active brazing process.

8. (Previously presented) A process as claimed in claim 1, wherein structuring of the at least one metal foil takes place by means of masking-etching process and wherein the at least one coating of brazing resist is applied immediately after this structuring.

9. (Previously presented) A process as claimed in claim 1, wherein structuring of the at least one metal foil takes place by means of a masking-etching process using an etching resist and wherein the at least one coating of brazing resist is applied immediately before application of the etching resist.

10. (Cancelled)

11. (Previously Presented) A process as claimed in claim 10, wherein removal takes place by etching, using hydrogen peroxide, sodium persulfate, copper chloride or iron chloride.

12. (Cancelled)

13. (Previously Presented) A process as claimed in claim 1, wherein before the application of at least one brazing resist coating cleaning of the metal surfaces, by removing a surface area of the metal coatings, takes place.

14. (Previously presented) A process as claimed in claim 13, wherein cleaning takes place by chemical removal or by plasma etching or by electrical etching or galvanic removal or by mechanical working, by brushing or grinding.

15. (Previously Presented) A process as claimed in claim 14, wherein chemical cleaning takes place using a hydrogen peroxide solution or a sodium persulfate solution.

16. (Previously Presented) A process as claimed claim 1, wherein a surface metal coating is applied to at least one surface area of the at least one metal coating, which area is produced by removal and adjoins at least one brazing resist coating.

17. (Previously Presented) A process as claimed in claim 16, wherein the surface metal coating is applied such that the surface which has been formed by this surface metal coating is level or roughly level with the surface of at least one brazing resist coating or level or roughly level with the untreated surface underneath at least one brazing resist coating.

18. (Previously Presented) A process as claimed in claim 16, wherein the surface metal coating is applied such that the surface which has been formed by this surface metal coating projects over the surface level of at least one brazing resist coating or over the surface level of the untreated surface underneath at least one brazing resist coating.

19. (Previously Presented) A process as claimed in claim 16, wherein the surface metal coating is applied such that the surface which has been formed by this surface metal coating is somewhat lower than the surface level of at least one brazing resist coating or of the untreated surface underneath at least one brazing resist coating.

20. (Previously presented) A process as claimed in claim 1, wherein an epoxide-based coating is used for the brazing resist coating and wherein the brazing resist coating cures thermally.

21. (Previously Presented) A process as claimed in claim 1, wherein at least one brazing resist coating has a thickness of 0.5 to 100 microns.

22. (Previously Presented) A process as claimed in claim 1, wherein at least one brazing resist coating is structured in an area for forming an optically readable code.

23. (Currently amended) A process for producing a metal-ceramic substrate comprising a ceramic layer and a structured metal layer with conductive tracks and contact surfaces on at least one surface side of the ceramic layer and a brazing resist applied to the structured copper layer, the process comprising the following steps:

a) applying at least one metal foil to at least surface side of the ceramic layer by high temperature bonding at a bonding process temperature higher than 650°C for forming the at least one metal coating on the ceramic layer,

b) structuring the metal coating on the at least one surface side of the ceramic layer by applying a mask of a photo resist or edging resist and by subsequent to edging away areas of

the metal layer which are not covered by the mask of photo resist or edging resists for forming a structured metal layer with the conductive tracks and contact surfaces,

c) removing the mask of photo resist and applying at least one coating of brazing resist to the structured metal coating and,

d) after applying the brazing resist to the structured copper layer removing some metal from the structured metal coating in an amount of 0.1 – 20 microns at least in surface areas of the structured metal coating bordering the brazing resist coating.